# Technical description and operating instructions



# T 400

Stereo Floor Speakers with Bi-Wiring/Bi-Amping



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### General notes and information

### **Notice**

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### Original packaging

If you wish to exercise your eight-week right of return, we ask that you be absolutely sure to hold onto the packaging. We can only accept the return of the speakers WITH THE ORIGINAL PACKAGING.
Empty boxes are not available!

### Complaints

In case of complaint we will need the following information to process your enquiry:

### 1. Invoice number

Can be found on the sales slip (enclosed with the product) or on the order confirmation received as a PDF document, e. g. 4322543

### 2. Serial number and/or batch number

Found on the back of the device, e. g. serial number: UL 04007480121A

Many thanks for your support!

### Contact

For questions, suggestions or criticism please contact our customer service department:
Lautsprecher Teufel GmbH
Gewerbehof Buelowbogen · Buelowstraße 66

10783 Berlin (Germany)

Tel.: 00800 - 200 300 40 (free of charge) Fax: +49 (0)30 - 300 930 930

www.teufelaudio.com

### Warranty conditions

12 year warranty for loudspeakers from date of purchase. Covers materials and workmanship, excludes damage caused by improper use or electrical or mechanical overload. Proof of warranty is the original of our invoice. This warranty applies solely to loudspeakers, amplifiers and electronics purchased from Teufel by an end user for private use. The warranty is not valid for loudspeakers, amplifiers and electronics, which pass to an end user via

a third party merchant. In the case of a private re-sale of Teufel products the warranty may be transferred to the purchaser as long as the original proof of purchase is also passed on to the purchaser.

### **Returns**

Teufel provides the right to exchange or return within eight weeks with refund of the purchase price paid. Return of individual components sold as a package is only possible if these components are also sold individually by Lautsprecher Teufel. In the case of the return of one or more individual components the package price reduction offered by Lautsprecher Teufel on all components in a package no longer applies. The amount refunded to the customer for the components returned will therefore only be the difference between the package price and the purchase price of the individual parts. The economic result for the customer is that it is as if he/she had originally bought the remaining components at their individual prices.

Further information on the subject of returns may be found on the back of the returns form enclosed with the order or online in the support area of our website www. teufelaudio.com.

If you need to return your goods please do not act without first speaking to Lautsprecher Teufel.

We can only process or accept your returns if you give us prior notification by telephone and discuss how to proceed!

### Proper use

Only use the speakers as described in these instructions. Any other use will be deemed as not in accordance with the instructions and may lead to damage to property or even persons. The manufacturer accepts no liability for damage caused by use not in accordance with the instructions.

The speakers are intended for private use.



Before using the speakers for the first time please first read the safety notes and operating instructions carefully. This is the only way to use all

functions safely and reliably.

Keep the operating instructions safe and pass them on to anyone who may own the unit after you.

# Safety notes

### Caution icons

You will find the following caution icons used in these instructions:

### Danger High risk!

Failure to observe the warning may result in severe personal injury or death.

### Attention Moderate risk!

Failure to observe the warning may result in property damage.



### Minor risk!

Points which should be observed when handling the unit.

### Safety notes

### Danger Danger to children!

Children can become trapped in the packing film when playing and suffocate.

- Do not allow children to play with the unit or the packing film. Danger of suffocation.
- Ensure that children do not remove small parts from the unit or take them off of the unit (e. g. control knobs or plug adapters). They could swallow the parts and choke. Never allow children to use electrical devices without supervision.

### Danger Danger to hearing!

Loud noise may lead to hearing loss. Particularly if a subwoofer on full volume in

»Standby/Auto On« mode is switched on by a bass beat, sudden very high sound pressure may result. This may cause physical and psychological damage. Children and pets are at particular risk.

- Set your signal source unit volume control to a low
- When the volume is set high, always keep a certain distance from the unit and never place your ear directly on the speaker.
- To avoid damage to health, avoid extended listening at high volume.

### Danger of injury/damage!

Selecting an incorrect location may result in damages.

- Never use the unit unmounted in vehicles, in unstable locations, on wobbly tripods or furniture, on underdimensioned brackets etc. The speakers could tip or fall down and cause injury to persons or be damaged.
- Arrange the speakers so that they cannot be knocked over accidentally and make sure that the cables do not pose a trip hazard.
- Ensure that any wall mounting is performed in a professional manner.
- Only use suitable wall brackets for mounting. Check the carrying capacity of the walls.
- Do not use the speakers if the housing or the connector cables are defective or if they exhibit any other visible damages.
- Only use the speakers indoors.
- Do not use the speakers in damp rooms and protect it from water drops and splashes. Ensure that no vases or other vessels filled with liquid are placed on or near the speakers to prevent the housing from being penetrated by liquid.
- Do not place the speakers near sources of heat (e.g. heaters, ovens, other heat generating equipment such as amplifiers etc.).

# **Unpacking and setup**

Open the boxes carefully, take out the speakers in their EPE packaging foam parts and carefully take the foam parts off without touching the diaphragms.

### **Connector cable**

Due to differing customer requirements, the T 400 series is shipped without connector cables. You can find suitable cables in our webshop (www.teufelaudio.com) in the "Accessories" area.

### Check to be sure

- Check that all items have been delivered and that nothing is damaged.
- If the delivery is incomplete or you find damage sustained in transit, do not operate the unit but contact our service department (see page 3).

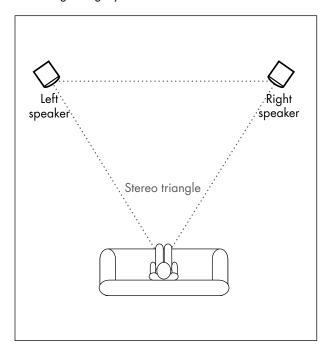
### Location tips

- Select a stable, level base.
- Make sure that the environment is clean and free from dust.
- Avoid placing the unit close to sources of heat or in direct sunlight.
- Arrange the connector cables so that they do not pose a trip hazard.
- Do not place any heavy objects on the cables or the speakers.

The following information concerns an "ideal listening room", where the listener sits in a central position at an adequate distance in front of the speakers (see the adjacent graphic) and there are no objects between the listener and speakers (tables or the like). Unfortunately, available space, furnishing or other circumstances may not always allow for an optimum arrangement.

Modern amplifiers offer a variety of possibilities for electronically compensating losses associated with the arrangement. The following generally applies: You can always experiment on what works best in your listening room in terms of sound and appearance based on our recommendations. Let your ears (and eyes) be the judge!

The speakers should be situated to the left and right of the listener and if possible, form an equilateral triangle with the listener – the so-called stereo triangle (distance from the listener = distance between the speakers). The speakers should project sound straight into the room or be arranged slightly towards the listener.



# Removing the protective grids

You can remove the protective grids from the speakers by carefully reaching behind the protective grid and slowly pulling it off to the front.

When reattaching the grids, ensure that the installation pins slide into the corresponding holes on the speaker.

# **Connecting**

### **Connection variations**

In addition to a standard connection, where every speaker column is connected to the amplifier with a cable, you can also choose the variants "Bi-Wiring" or "Bi-Amping".

### Standard connection

With this connection, the T 400 speakers are connected like conventional speakers with one 2-core speaker cable each. The contact bridges between the connector terminals may <u>not</u> be removed in the process; you can connect the cables accordingly to the top or bottom terminals.

### **Bi-Wiring**

For this, the high and midrange speakers are connected with one cable and the two low range speakers are connected with a second cable. This allows you to reduce distortion with very long cables.

### **Bi-Amping**

For this, the high/midrange and low range speakers have their own amplifiers.

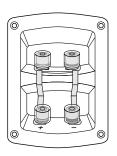
### Connecting the cables

# Danger

### Danger Danger of injury/damage!

Arrange the cables so that they do not pose a trip hazard.

- 1. Turn off your amplifier.
- Lay the speaker cable from your amplifier to each of the speakers. This cable should be a high-quality double-core speaker cable with marked wires. The cross-section should amount to at least 2.5 mm<sup>2</sup>.
- 3. A connector terminal with four binding posts is located on the back of each speaker. You can connect the speaker cables using banana plugs or directly. We only describe the direct connection here. The terminals are each marked red (+) and black (-).

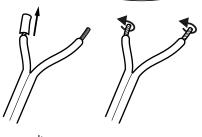


### Make sure the polarity is correct!

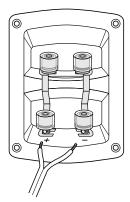
Connect the like coloured terminals of your speakers and amplifier with one another.

Otherwise the sound quality will suffer. The individual strips of the speaker cables are marked with different colours or forms to facilitate this.

- 4. You only have to remove the contact bridges when using Bi-Wiring or Bi-Amping: Turn the binding posts counterclockwise until loose and then pull out the contact bridges. The top terminals lead to the high range and midrange speakers, the bottom terminals lead to the low range speakers.
- 5. Split the core on both ends up to approximately 30 mm and remove approximately 10 mm of the insulation on each piece. Twist the core so that no wires are protruding.



- 6. Turn the binding post counterclockwise until loose. Run the stripped cable into the hole that is now visible. Turn the post clockwise until closed. The cable has now been clamped in place.
- 7. Connect the other end of the speaker cables to your amplifier. The operating instructions of the appliance should contain notes on this.



# Care and cleaning

The veneered surfaces of our speakers have a protective surface coat, which eliminates the need for wood polish.

- You can best remove dust or small amounts of dirt with a dry, smooth leather cloth.
- Rub off stubborn dirt with a damp cloth. Make sure that no liquid penetrates the speakers.
- Then immediately wipe the surfaces dry using a soft cloth and without applying pressure.

### Attention Risk of damage!

 $\triangle$ 

Using the wrong cleaning materials may damage the delicate surface of the case.

- If possible use only plain, lukewarm water with no cleaning products. In case of stubborn marks, a mild soap solution may be used.
- In no circumstances should caustic cleaning products, white spirit, thinners, petrol or similar be used for cleaning.

# **Protecting the environment**

## Disposing of the unit



Used units must not be disposed of with household waste.

If the unit is no longer operational, every consumer is required by law to dispose of used devices separate from household waste, e. g. at a collection point run by the communal authority borough. In this way, used devices can be recycled and waste materials disposed of in an environmentally friendly manner.

For this reason, electrical equipment is labelled with the displayed symbol.

## Technical data

Impedance:

Recommended amplifier output:

Crossover frequency(ies):

Connector terminals, maximum cord cross-section:

Banana plug compatible:

Magnetically shielded:

Front cover removable:

Volume:

Dimensions (W  $\times$  D  $\times$  H):

Net weight:

4-8 Ohms

> 50 Watts

400/3000 Hz

 $10 \text{ mm}^2$ 

yes

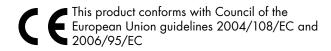
yes

yes

23 litres

162 mm x 300 mm x 950 mm

19 kg



Technical changes reserved!



For questions, suggestions or criticism please contact our customer service department:

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